Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of the claims in the application:

Listing of Claims

1. (original) A method for detecting DESC1 gene expression in a sample from a subject comprising the following steps:

providing a tissue sample from the subject;

assaying for expression of the DESC 1 gene in the sample.

2. (currently amended) An isolated nucleic acid comprising a polynucleotide encoding a protein having at least 90% identity to ~~the~~ a DESC1 protein ~~shown in Figure 1A or B~~ wherein the DESC1 protein comprises the amino acid sequence set forth in SEQ ID NO. 2 or SEQ ID NO. 4.

3. (currently amended) ~~The~~ An isolated nucleic acid ~~of claim 2 wherein the~~ comprising a polynucleotide that encodes a mature ~~from~~ form or a soluble form of ~~the~~ a DESC1 protein, wherein the mature form of the DESC1 protein comprises the amino acid sequence of SEQ ID NO. 2 or SEQ ID NO. 4, and where the soluble form of the DESC 1 protein comprises amino acid 191 through amino acid 422 of SEQ ID NO. 2 or SEQ ID NO. 4.

4. (original) A recombinant vector comprising the nucleic acid of claim 2.

5. (previously amended) A recombinant host cell comprising the recombinant vector of claim 4.

6-8 (currently canceled)

9. (currently amended) ~~The~~ An isolated nucleic acid ~~of claim 2~~ that encodes a mature form of a DESC1 protein, wherein the nucleic acid hybridizes under stringent conditions with the nucleotide sequence shown in ~~Figure 1A or 1B~~ SEQ ID NO. 1 or SEQ ID NO. 3.

10. (withdrawn) A method for diagnosing squamous cell carcinoma in a subject, comprising:

determining the presence, absence, or amount of expression of the DESC1 gene in a tissue sample obtained from the subject, wherein the diagnosis of squamous cell carcinoma is based on the presence, absence, or amount of expression of the DESC 1 gene in the sample.

11. (withdrawn) The method of claim 10 wherein the tissue sample is an epithelial tissue sample from the head, neck, oral mucosa, tonsils or skin of the subject.

12. (withdrawn) The method of claim 10 wherein the level of DESC 1 gene expression is determined using a nucleic acid probe which hybridizes to a transcript of the DESC 1 gene.

13. (withdrawn) The method of claim 10 wherein the level of expression of the DESC 1 gene is determined using a polymerase chain reaction and primers which are complementary to specific regions of the DESC 1 gene.

14. (withdrawn) The method of claim 10 wherein the level of expression of the DESC 1 gene is determined by assaying for the presence, or absence, or a change in the levels of the protein encoded by the DESC 1 gene in the sample.

15. (withdrawn) The method of claim 14 wherein an antibody which is immunospecific for the protein encoded by the DESC 1 gene is employed in the assay.

16. (withdrawn) A method for diagnosing prostate carcinoma in a subject, comprising:

determining the presence of, or absence of, or amount of expression of the DESC1 gene in a tissue sample obtained from the prostate of the subject, wherein the diagnosis of prostate carcinoma is based on the presence, absence, or amount of expression of the DESC 1 gene in the sample.

17. (withdrawn) The method of claim 16 wherein the level of DESC 1 gene expression is determined using a nucleic acid probe which hybridizes to a transcript of the DESC 1 gene.

18. (withdrawn) The method of claim 16 wherein the level of expression of the DESC 1 gene is determined using a polymerase chain reaction and primers which are complementary to specific regions of the DESC 1 gene.

19. (withdrawn) The method of claim 16 wherein the level of expression of the DESC 1 gene is determined by assaying for the presence, or absence, or a change in the levels of the protein encoded by the DESC 1 gene in the sample.

20. (withdrawn) The method of claim 19 wherein an antibody which is immunospecific for the protein encoded by the DESC 1 gene is employed in the assay.

21. (currently amended) An isolated polynucleotide which ~~encodes amino acids 191 through 422 of the amino acid sequence shown in Figures 1A or 1B~~ hybridizes under stringent conditions to a sequence comprising nucleotide 626 through nucleotide 1321 of SEQ ID NO. 1 or SEQ ID NO. 3.

22. (currently canceled)